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Fears and Values:

Analyzing Key Factors Shaping the Public Opinion on Immigration in the Context of the European Migrant Crisis

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Abstract

This paper studies the effect of the European migrant crisis on public immigration opinion in 18 European countries, using ESS data from 2012 to 2018. A country-fixed effects regression was estimated in order to examine (1) key factors shaping public opinion on immigration on an individual- and a macro-level, (2) whether opinion on immigration shifted and (3) if the magnitude, by which key factors affect public immigration opinion, was altered during the crisis. The main findings suggest that economic fears and cultural values are significantly shaping immigration opinion on an individual-level, while social welfare concerns are significant on a macro-level. Finally, the results indicate that the crisis improved immigration opinion and altered the magnitude of explanatory variables.

Keywords: European migrant crisis, immigration opinion, welfare concerns, country-fixed effects regression

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1. Introduction

It was in September 2015 that the image of three-year old Alan Kurdi, lying face down in the sand of a coast near Bodrum, went viral. The toddler had drowned in the Mediterranean Sea, fleeing from Syria to Europe with his family. The picture caused a global outcry, shedding light on the horrific human catastrophe that had been in the offing and ignored for quite some time: the European migrant crisis. Today, more than four years later, the media narrative has shifted from a sympathetic and empathetic response towards suspicion and hostility regarding refugees and immigrants (Georgiou & Zaborowski, 2017). The influx of immigrants and asylum seekers declined compared to 2015, but the issue of immigration remained in the center of attention in Europe, especially when it comes to politics and campaigns. In recent years, right-wing populist parties experienced rising support, propagating xenophobia while gaining votes and seats in the parliaments of Europe (Inglehart & Norris, 2016).

In this context, it is widely believed that the migrant crisis hardened the fronts between natives and immigrants. However, discussions on that matter are often intertwined with emotions and political agendas; neutral evidence on the overall opinion on immigration controlling for an individual and national context and including data from recent years is scarce. Yet, it is pivotal to the political debate, that aims to successfully integrate the vast influx of immigrants, to take into account citizens' view on immigration and to address the factors that cause the most discomfort. Precisely for this reason, this paper offers an analysis of the overall opinion on immigration in the context of the European migrant crisis, focusing on three main research questions: (1) what are the main individual- and macro-level factors shaping public opinion on immigration in the context of the European migrant crisis? (2) How did the public opinion on immigration shift during the migrant crisis? (3) And did the migrant crisis alter the magnitude in which certain factors affect the opinion on immigration?

The paper uses data from the European Social Survey (ESS) waves 6 to 9 in order to capture the public opinion right before and after the peak of the migrant crisis. Since the 2018 ESS data has only been published in the end of October 2019, it also offers a unique perspective on how the publics opinion on immigration has been affected in more recent years. In the following, chapters 2 and 3 offer a summary on the main characteristics and the economic consequences of the migrant crisis. Chapter 4 introduces the theoretical framework behind the individual- and macro level factors that shape the public opinion on immigration. Finally, chapter 5 contains the main analysis and its findings.

2. Recent Migration Trends in Europe

Vast refugee movements have always been part of our history. In recent years, it has been the European migrant crisis that has captured global attention (Apap, Radjenovic, & Dobreva, 2019; Hatton, 2016). As a large share of immigrants between 2012 and 2018 has been classified as asylum seekers, this chapter summarizes the most recent migration trends in Europe with a special focus on asylum seekers. The following subsections offer an overview over the main characteristics of the European migrant crisis (Section 2.1) and an outlook on the skills of immigrants arriving in Europe after 2012 (Section 2.2).

2.1 Main Characteristics of the recent European Migrant Crisis

Conflicts in Syria and the Middle East forced hundreds of thousands of individuals to flee their home countries and to undertake dreadful journeys in the hope of finding asylum in Europe. According to Eurostat, the number of first-time asylum applicants in EU countries peaked at 1.3 million in 2015, with a slight decrease in 2016 before plummeting down to around 735,000 in 2017 and a near pre-crisis level around 665,000 in 2018.

Among the most popular destinations in Europe for asylum seekers were Germany, France, Sweden, Greece and Italy. Germany. France and Sweden quickly became prime destinations

because of their well-established welfare systems, whereas Greece and Italy, due to their geography, are the predetermined arrival destinations for asylum seekers crossing the Mediterranean Sea (Hudson, 2018). In 2015, France and Sweden faced around 100,000 asylum applications, whereas Germany faced five-times the amount of applicants. A year later, Germany alone received 700,000 asylum applications according to Eurostat, cementing its status as the number one welfare state for refugees to seek asylum (Hudson, 2018). As depicted by the World Migration Report (IOM, 2018), most asylum claims in Europe were made by citizens from Syria, Iraq and Afghanistan, with a vast majority of them being from young adult males (Connor, 2016).

A lot of asylum seekers reach Europe through the Mediterranean Sea, crossing it from Libya to Italy or from Turkey to Greece (Hudson, 2018; IOM, 2018). Sea arrivals in Greece alone accumulated to 850,000 in 2015. As sea routes are treacherous and the decommissioned cargo ships used for the journey often in bad condition, underequipped and overcrowded (Hudson, 2018), the number of sea fatalities is disturbingly high with 4,500 people dying solely on the sea route from Libya to Malta and Italy in 2017 (IOM, 2018). While not being as treacherous as the sea routes, the land routes are far from safe, since refugees are highly vulnerable to abuse, exploitation and human trafficking (IOM, 2018).

With regard to the unprecedented influx of asylum seekers in addition to an already high level of immigration to both economically stable and instable European countries, it comes as no surprise that the migrant crisis is posing an immense challenge to EU countries and the European unity (Hatton, 2016; Kancs & Lecca, 2018). And even though the number of arrivals is on a downward trend since 2016, the long-term integration of asylum seekers and immigrants is still a challenge in many European countries.

2.2 Skills of Immigrants Arriving in the European Union after 2012

Given that labor market integration of immigrants is a key point when discussing immigration, this section elaborates on the qualifications and skills of the incoming immigrants in the context of the European migrant crisis. This is a crucial factor, as it determines with what kind of native workers immigrants potentially compete on the labor market. It must be noted that the assessment of skills and qualifications of immigrants that arrived in Europe after 2012 is a difficult task, due to the large influx and a lack of cross-country data on education and skills (Dumont, Liebig, Peschner, Tanay, & Xenogiani, 2016). Therefore, this subsection is based on data from specific countries rather than Europe wide data.

Multiple studies have found that immigrants arriving in Europe after 2012 participate, on average, in the low-skill labor market. In the case of asylum seekers this can be explained through several reasons: first, asylum seekers often face legal restrictions that deny them access to the labor market for longer periods (Ruiz and Vargas-Silva 2018, Dumont et al. 2016). Second, their skills are less transferable to the receiving market's skill sets due to diverging international standards. Third, due to stigma, asylum seekers are less favorably selected by employers in their host country (Cafferty et al. 1983, Chiswick 1999, Constant and Zimmermann 2005). Those findings are supported by data from Turkey, UK and Germany: on the Turkish job market, Tumen (2018) found that asylum seekers mostly compete with low-skill native workers, mainly because of legal restrictions. Using UK data, Ruiz and Vargas-Silva (2018) found that asylum seekers have worse labor market outcomes compared to native workers. Finally, the German IAB-BAMF-SOEP survey is offering detailed information on the level of education of immigrants that came to Germany during the migrant crisis (Brücker, Rother, & Schupp, 2016; Poutvaara & Wech, 2016), according to which the level of education for asylum seekers in Germany is very polarized: While 32% of them received a secondary educational degree (which is above the German average of 29%), 10% of the asylum seekers only finished primary

education and 9% do not hold a degree of any kind. Moreover, 12% completed tertiary education, but only 6% completed an apprenticeship. And compared to the 88% finishing more than ten years of education in the German population, Brücker et al. (2016) quantified this share with 55% for asylum seekers, indicating that, on average, the level of education and therefore the level of skills is lower for asylum seekers compared to German natives.

In conclusion, most evidence indicates that a vast majority of the immigrants that arrived in Europe after 2012 are most likely competing with the low-skilled workers on their host country's labor market.

3. Economic Impact of the European Migrants Crisis

Immigration has always been part of Europe, yet the unprecedently large influx of immigrants during the migrant crisis has brought a new dimension to a persistent discussion about immigration and its economic consequences for Europe. As outlined in Section 2.2, the majority of immigrants that arrived between 2012 and 2018 is competing on the low-skill labor market. Therefore, this chapter focusses on the economic consequences of low-skill immigration from poorer countries in general and offers a more in-depth look on the economic consequences of the European migrant crisis. These elements are essential for an understanding of the public opinion on immigration.

The economic consequences of immigration on the receiving country is subject to an ongoing discussion (Scheve & Slaughter, 2001). According to the textbook model of a competitive labor market, immigration should cause adverse effects on wages in the receiving labor market because labor supply increases (G. Borjas, 2013). Nonetheless, a long strand of empirical evidence refutes the existence of adverse effects and claims that the impact on the average worker's wage and employment are small or close to zero (i.e., Card 1990; National Research Council 1997; Clemens and Hunt 2017) . By contrast, Borjas (2003) found negative effects of an

increase in labor supply through immigration on wages in a scenario where native workers and immigrants are perfect substitutes in both education and experience. A key difference between both findings is the assumption of perfect substitutability of native workers and immigrants. When loosening this strict assumption, the adverse effects of an immigration surge have been found to be attenuated (Card, 1990; Ottaviano & Peri, 2012). Furthermore, even if they exist, they would be short-termed, as the increase in labor supply changes the composition of the output mix. Hence, the economy expands its capacities and absorbs the influx of immigrants by producing more of such goods that use the additional labor supply (Card, 1990; Dustmann, Glitz, & Frattini, 2008; Dustmann, Hatton, & Preston, 2005; Dustmann & Preston, 2007).

Focusing solely on the low-skill labor market, an influential paper examining the aftermath of the Mariel Boatlift found that an increase in low-skill labor supply by 7% had no significant effects on wages and unemployment of low-skilled workers (Card, 1990). Moreover, a study on the fall of the Berlin wall showed that native low-skilled workers were even benefitting from low-skill immigration in the long run (Brücker & Jahn, 2011).

In conclusion, literature on the consequences of immigration on wages and employment in the receiving country implies that the direction and magnitude of its impact strongly depend on the substitutability between immigrants and native workers. In a case where the substitutability is imperfect, the economic impact on wages and unemployment of low-skill native workers will be rather small and therefore neglectable.

Unfortunately, the empirical evidence outlined in the previous paragraphs is limited as it does not consider an influx of immigrants as large as during the European migrant crisis. Moreover, most literature does not take into account that Europe is increasingly struggling with a diminishing and ageing workforce due to low fertility and higher life expectancy (Sides &

Citrin, 2007). While long-term economic consequences are so far only subject so speculation, the following paragraphs will offer a brief overview on the existing empirical evidence.

In order to fill the research gap on this subject, Kancs and Lecca (2018) assessed the expected long-term effects of the European migrant crisis, focusing on economic, fiscal and social consequences. According to their findings, the integration of asylum seekers, albeit being costly in the short-run, yields significant socioeconomic and fiscal benefits in the medium- and long-run. Their findings are in line with a 2016 IMF report that emphasized the importance of a sound integration into the labor market and the resulting economic benefits for the host country. Moreover, Kancs and Lecca (2018) found a positive correlation between the initial investments into integration at arrival and the long-run benefits.

All in all, existing empirical evidence suggests that the European migrant crisis might be costly in the short-run but might bring socioeconomic and fiscal benefits in the long-run.

4. Key Factors Shaping the Public Opinion on Immigration

As long as there has been immigration, there has been an ongoing academic discussion on the determinants that shape an individual's opinion on immigration. Gradually, the scientific community began focusing on two main channels: economic fears and cultural values (de Vries & Hoffmann, 2016; Hatton, 2016). Economic fears are sparked from the substantial changes in the labor market composition of the receiving country and the fiscal consequences caused by immigration. They affect public opinion by increasing perceived economic insecurity and by generating a feeling of being left behind (de Vries & Hoffmann, 2016; Inglehart & Norris, 2016). By contrast, cultural values are expected to shape public opinion on immigration through a perceived cultural distance between the native population and immigrants, causing a fear of losing the national identity through cultural heterogeneity (Dustmann & Preston, 2007). The

following paragraph will offer a summary about the ongoing academic discussion over fears and values and provide its main empirical results.

A main finding in the literature on economic fears was an apparent relationship between higher levels of education and a positive attitude towards immigration, the so-called education effect (Hatton, 2016). Using US data, Scheve and Slaughter (2001) found that low-skilled workers were significantly less likely to be in favor of immigration. Their findings were confirmed by Ortega and Polavieja (2012) and Malhotra, Margalit, and Hyunung Mo (2013), who found that the education effect is stronger among workers that exhibit a higher propensity to compete with low-skilled immigrants, and in countries with a higher share of low-skilled workers.

But the education effect is not the only channel through which economic fears shape opinions on immigration. A strand of literature focused on the impact of welfare concerns regarding immigration opinion. On the bottom end of the income distribution, individuals might fear to compete with immigrants for a fixed supply of welfare benefits from the government, while individuals on higher ends might fear potential tax implications induced by the burden of immigration on government spending (Hatton, 2016). In line with this hypothesis, Facchini and Mayda (2009) were able to show that the attitude towards low-skill immigration was negatively related to income, even after controlling for education. Their findings are supported by Boeri (2010) and Dustmann and Preston (2007), who also found an adverse connection between perceived fiscal burdens and immigration opinion.

Despite of this evidence, many academics, in particular from the field of political science, have been opposing the economic fear hypothesis, emphasizing the role of cultural values (Citrin & Wong, 1997; Rustenbach, 2010). A strong argument for the cultural values hypothesis has been proposed by Hainmueller and Hiscox (2007): according to their analysis of ESS data, higher levels of education translate into a higher opinion on immigration regardless of the skills

and qualifications the immigrants inhabit, thus partially refuting the economic fears hypothesis. Moreover, Card, Dustmann and Preston (2012) used a simple latent factor analysis to show that cultural values have a 2-5 times stronger impact on immigration opinion than economic fears. Finally, Manevska and Achterberg (2013) tested both channels by studying to what extent the share of immigrants in the population drives immigration opinion. They concluded that cultural values have a higher explanatory power, especially for low-educated individuals who are very influenceable by authoritarian values.

Sides and Citrin (2007) give credit to both hypotheses, claiming that economic fears, cultural values and the level of information about immigration are significantly shaping the public opinion on immigration after analyzing ESS data from 2002. They also aimed to explain country variation by including macro-level variables such as the overall state of the economy or the share of immigrants in a country, finding them to be insignificant. These results have been reassessed by Hatton (2016), who claims that, while it is likely that macro-level variables do shape the opinion on immigration, research so far mainly focused on cross-sectional data omitting a time-dimension. He argues that in order to identify driving macro-level factors, a time dimension must be included into research.

In conclusion, literature on immigration gives three main suggestions for this paper: first, on an individual-level, both the economic fears and the cultural values hypothesis must be included into the model. Second, macro-level variables, such as GDP and the unemployment rate, cannot be neglected. Third, in order to fully understand the relationship of macro-level variables and immigration opinion, the analysis must include a time dimension.

5. The Analytical Approach

This paper contributes to the ongoing discussion outlined in chapter 4 by examining the key factors shaping public opinion on immigration in the context of the European migrant crisis and

by including a time dimension, in order to analyze the effects of macro-level variables on immigration opinion. Subsection 5.1 summarizes the data used, subsection 5.2 presents the methodology and subsection 5.3 presents the results.

5.1 Preferences towards Immigration in Europe

The data analyzed in this paper are from the European Social Survey rounds 6 to 9. The ESS is a repeated cross-sectional survey that is conducted biennially. This cumulative data set was chosen because it provides the opportunity to examine the changes in immigration opinion in the context of the European migrant crisis. The country coverage has not been consistent for all years in question. Therefore, this paper will only analyze the 18 countries that are included in all four rounds between 2012 and 2018. The main focus of the analysis is placed on five questions from the ESS that will serve as dependent variables:

- (1) To what extent do you think [country] should allow people of the same race or ethnic group as most [country] people to come and live here? (1=many/2=some/3=a few/4=none)
- (2) How about people of a different race or ethnic group from most [country] people? (1=many/2=some/3=a few/4=none)
- (3) How about people from the poorer countries outside Europe? (1=many/2=some/3=a few/4=none)
- (4) Would you say it is generally bad or good for [country]'s economy that people come to live here from other countries? (range: 0 = bad, 10 = good)
- (5) Would you say that [country]'s cultural life is generally undermined or enriched by people coming to live here from the other countries? (range: 0 = undermined, 10 = enriched)

As Table 1 shows, the average opinion on immigration from a different and the same ethnic group is, at a country-level, higher than those of immigrants from poorer countries outside of Europe. When examining the variation in means over the years, it strikes that most questions

Table 1: Average opinion on immigration by country and year

	(1) Poor countries	(2) Same ethnicity	(3) Different ethnicity	(4) Improve economy	(5) Enrich culture
Country					
BE	0.58	0.75	0.60	0.60	0.77
CH	0.58	0.81	0.62	0.81	0.77
CZ	0.26	0.40	0.26	0.47	0.46
DE	0.65	0.88	0.71	0.76	0.79
EE	0.32	0.70	0.44	0.64	0.71
ES	0.54	0.62	0.56	0.70	0.81
FI	0.38	0.66	0.48	0.71	0.90
FR	0.55	0.74	0.60	0.61	0.66
GB	0.46	0.62	0.54	0.64	0.65
HU	0.12	0.47	0.19	0.46	0.64
IE	0.49	0.63	0.53	0.66	0.73
LT	0.38	0.62	0.49	0.70	0.66
NL	0.56	0.71	0.66	0.70	0.81
NO	0.70	0.83	0.74	0.78	0.76
PL	0.54	0.67	0.54	0.69	0.81
PT	0.46	0.57	0.49	0.63	0.73
SE	0.84	0.90	0.88	0.75	0.88
SI	0.50	0.71	0.57	0.52	0.67
Year					
2012	0.49	0.66	0.54	0.66	0.75
2014	0.46	0.68	0.55	0.65	0.73
2016	0.53	0.70	0.55	0.68	0.71
2018	0.52	0.72	0.56	0.71	0.71

Source: ESS data file round 6-9. Means calculated using design weights.

exhibit a positive trend over the span from 2012 until 2018, except for the question on the cultural enrichment by immigrants. This apparent upward trend comes surprising, as the media narrative became increasingly negative over the same period. In order to examine whether the upward trend is a result of the European migrant crisis, the paper will examine the public opinion on immigration controlling for a variety of individual- and macro-level factors. Finally, the differences across countries are striking: while Hungary exhibits comparably low values for the attitude on immigration from poorer countries outside of Europe and from different ethnic groups, northern countries such as Sweden and Norway exhibit very high values. The question arises if these country differences can be explained on an individual-level within a country, or if they are caused by cross-country variation on a macro-level.

5.2 Methodology

The approach used in this paper can be considered as an altered replication of Hatton's approach in his 2016 paper, applied in the context of the European migrant crisis and extended with elements from an analysis by Inglehart and Norris (2016). Following Hatton (2016), the following country-fixed effects regression of Y_{ic} on all individual-level explanatory variables is conducted in a first step, using robust standard errors to control for heterogeneity:

$$Y_{ic} = X_{ic}\alpha + crisis_i\eta + \gamma_c + \epsilon_{ic} \quad (1)$$

Where Y_{ic} is a vector comprised of the five dependent variables derived from the ESS questionnaire. The variables have been converted into binary variables that reveal whether an individual has a positive attitude towards immigrants from poorer countries outside of Europe (1), from the same ethnic group (2), from a different ethnic group (3), and whether an individual perceives immigrants to have a positive impact on the economy (4) and culture (5). The subscript i marks the individual and c labels countries. X_{ic} is a vector comprising a set of individual-level variables that are expected to shape an individual's overall opinion on immigration. Finally, γ_c captures the country-fixed effects, while ϵ_c is an idiosyncratic error term.

According to Eurostat data on asylum applications and an analysis of google trends featuring the online search of the key words "European migrant crisis" (Figure 1, Appendix G), the crisis climaxed towards the end of 2015 in both the number of refugees arriving and public attention. Accordingly, the model captures the time-dimension using $crisis_i$, a binary variable indicating whether the data is from before the migrant crisis (2012 and 2014) or after its peak (2016 and 2018). The model is estimated controlling for endogeneity by including country- and time-fixed effects on the one hand, and by omitting attitudinal variables on the other hand. Based on the empirical findings on key factors of immigration opinion (4.1), the individual-level variables are grouped into three categories: Socioeconomics, economic fear related variables and cultural value related variables, and tested for the baseline regression assumptions, including a Hausman test for fixed effects (Appendix E). Since age is unlikely to exhibit a linear relationship with the overall opinion on immigration, it is included in form of age brackets, each comprising 20% of the sample population.

In a second step, macro-level variables are included into the model and the following regression is estimated:

$$Y_{ic} = X_{ic}\alpha + Z_{ic}\beta + crisis_i\eta + \gamma_c + \epsilon_{ic} \quad (2)$$

Where Z_{ic} comprises five macro-level variables: the share of first-time asylum applicants, the share of foreign population, the logarithm of GDP per capita, the share of social benefits in GDP and the short-term unemployment rate. They were first entered individually and then simultaneously into the model in order to determine the direction of their relationship with the overall opinion on immigration.

Finally, in order to answer the third research question on whether the European migrant crisis altered the magnitude in which the individual- and macro-level variables shape the opinion on immigration, an additional model was estimated that considers interactions between selected independent variables and the crisis dummy:

$$Y_{ic} = X_{ic}\alpha + Z_{ic}\beta + I_{ic}crisis_i\theta + crisis_i\eta + \gamma_c + \epsilon_{ic} \quad (3)$$

Where I_{ic} comprises interaction terms between particularly significant, independent variables and the crisis dummy, which were individually entered into the model.

Table 2 contains the descriptive statistics of the explanatory variables. The signs of the estimated regression coefficients were, according to literature and common sense, expected as follows: on an individual-level, variables such as age, economic insecurity, being a native and the self-placement on the left-right scale for political orientation should exhibit a negative relationship with immigration opinion. By contrast, being part of an ethnic minority and higher levels of education are expected to entail a positive relationship (Hatton, 2016, 2017; Inglehart & Norris, 2016). The relationship for different levels of income as well as for being part of the labor force are only subject to speculation, as they will confirm or refute the economic fears hypotheses: individuals on the lower end of the income distribution and participants of the labor market are expected to have a negative relationship due to labor market competition and welfare concerns, while people on higher ends should exhibit a negative relationship if they fear the cost of immigration in form of potential tax implications. Following Inglehart and Norris (2016)

Table 2: Descriptive statistics of explanatory variables

Variable	Obs	Mean	Std. Dev.
1. Individual-level sociodemographics			
age			
32-43	130,022	.1890065	.3915153
44-55	130,022	.2052576	.4038913
56-67	130,022	.2042424	.4031484
68-100	130,022	.192975	.3946351
sex	130,356	.4712326	.4991737
brncntr	130,323	.8998642	.3001822
ethminor	129,042	.0553541	.2286709
2. Individual-level economic fear related variables			
education			
middle	129,571	.4951957	.4999788
high.	129,571	.2317031	.421922
ecoinsec	129,041	.2149937	.4108196
lbrforce	130,381	.5681273	.4953388
income			
2nd decile	106,603	.1066949	.3087264
3rd decile	106,603	.1058694	.3076719
4th decile	106,603	.109359	.3120906
5th decile	106,603	.1065542	.3085471
6th decile	106,603	.1041622	.3054722
7th decile	106,603	.1031022	.3040937
8th decile	106,603	.1002317	.3003101
9th decile	106,603	.0843879	.2779699
10th decile	106,603	.0845192	.2781662
3. Individual-level cultural values related variables			
religious	129,326	.3793437	.4852256
lrscale	115,914	5.104888	2.167307
authoritarian values			
1.safe			
2	128,513	.0650207	.2465633
3	128,513	.099772	.2996969
4	128,513	.1923385	.3941391
5	128,513	.3662275	.4817746
6	128,513	.2647203	.4411859
2.strong gov			
2	127,680	.048974	.2158145
3	127,680	.0989427	.2985862
4	127,680	.2016682	.4012473
5	127,680	.3822995	.4859511
6	127,680	.2565006	.436703
3.traditions			
2	128,415	.1023556	.3031166
3	128,415	.1422264	.3492835
4	128,415	.2267181	.4187103
5	128,415	.3181326	.4657531
6	128,415	.172986	.3782367
4. rules			
2	127,816	.1783892	.3828416
3	127,816	.1760891	.3808974
4	127,816	.2339691	.4233544
5	127,816	.2665785	.4421718
6	127,816	.0909354	.2875184
4. Macro-level variables			
lngdp	130,381	10.14945	.6167467
socben	130,381	26.47561	5.248681
ftap	128,367	.1101281	.1529721
foreign	130,381	.1157332	.0581054
stue	130,381	7.860852	4.216788

Z_{ic} includes four indicator variables that reflect the level of authoritarian values an individual holds: the importance of feeling safe, a preference towards a strong government, the importance of following traditions and customs and the importance of following rules. All variables are measured on a scale from 1 to 6 while the higher values on the scales regarding the four variables measuring authoritarian values are expected to come with a negative sign (Hatton, 2016).

5.3 Results

The following section offers a summary of the main results. The first part focusses on the question on what factors shape the attitude towards migration on an individual- and macro level in the context of the migrant crisis. Afterwards, the question on whether immigration opinion shifted during the crisis is examined. Finally, the last paragraph analyses how the crisis affected the individual- and macro-level factors shaping the opinion on immigration.

Individual-level Effects on the Overall Perception of Immigration

Table 3 summarizes the regression estimates of α, comprising the coefficients of individual-level variables in X_{ic} (Equation 1). The country-fixed effects are not shown here, but can be found in Appendix C.

Table 3: Correlates of immigration opinion across individuals

	(1) Poor countries	(2) Same ethnicity	(3) Different ethnicity	(4) Improve economy	(5) Enrich culture
crisis	0.046**	0.031**	0.005	0.031*	-0.027
	(2.48)	(2.60)	(0.27)	(1.97)	(-1.57)
age					
32-43	-0.049***	-0.036***	-0.049***	-0.011	-0.005
	(-6.68)	(-5.76)	(-6.81)	(-1.34)	(-0.68)
44-55	-0.067***	-0.042***	-0.067***	-0.013	-0.008
	(-5.57)	(-5.61)	(-5.79)	(-1.19)	(-0.69)
56-67	-0.100***	-0.046***	-0.082***	-0.009	-0.017
	(-7.04)	(-4.26)	(-5.41)	(-0.57)	(-1.25)
68-100	-0.135***	-0.056***	-0.115***	0.007	-0.019
	(-8.49)	(-3.81)	(-5.96)	(0.38)	(-1.22)
sex	-0.018**	-0.009	-0.010	0.020***	-0.023***
	(-2.60)	(-1.54)	(-1.28)	(3.35)	(-4.34)
Born in	-0.037**	-0.047***	-0.055***	-0.082***	-0.065***
country	(-2.48)	(-3.50)	(-3.56)	(-5.17)	(-4.53)
ethnic	0.018	-0.002	0.022	0.025	0.025
minority	(1.53)	(-0.18)	(1.43)	(1.70)	(1.51)
education					
middle	0.049***	0.075***	0.069***	0.066***	0.058***
.	(6.04)	(9.20)	(7.75)	(7.64)	(6.31)
high	0.166***	0.165***	0.190***	0.186***	0.155***
	(13.28)	(14.22)	(16.01)	(16.34)	(11.72)
economic	-0.051***	-0.068***	-0.060***	-0.066***	-0.048***
insecurity	(-4.90)	(-9.02)	(-7.25)	(-6.52)	(-4.45)
Participation	-0.018***	-0.022***	-0.019***	-0.021***	-0.013**
in labor market	(-3.29)	(-4.28)	(-3.27)	(-3.77)	(-2.45)
Income					
2nd decile	-0.001	0.001	-0.011	-0.001	-0.000
	(-0.07)	(0.10)	(-1.28)	(-0.14)	(-0.00)
3rd decile	0.006	0.020**	0.004	0.005	0.006
	(0.88)	(2.21)	(0.40)	(0.52)	(0.66)
4th decile	0.015*	0.033***	0.015	0.007	0.021**
	(2.10)	(3.70)	(1.45)	(0.71)	(2.49)
5th decile	0.017**	0.036***	0.017	0.020*	0.020**
	(2.19)	(3.80)	(1.69)	(1.96)	(2.29)
6th decile	0.022**	0.046***	0.030**	0.039***	0.033***
	(2.33)	(4.02)	(2.80)	(3.94)	(3.03)
7th decile	0.034***	0.058***	0.045***	0.040***	0.033***
	(3.14)	(5.61)	(3.96)	(3.98)	(3.30)
8th decile	0.032***	0.064***	0.048***	0.048***	0.042***
	(2.92)	(6.17)	(4.74)	(3.90)	(4.03)
9th decile	0.057***	0.080***	0.072***	0.083***	0.052***
	(4.67)	(7.35)	(5.92)	(7.63)	(4.69)
10th	0.066***	0.083***	0.076***	0.094***	0.060***
	(4.94)	(5.99)	(6.25)	(10.87)	(6.22)
religious	0.044***	0.022***	0.032***	0.049***	0.041***
	(5.18)	(3.32)	(4.02)	(7.42)	(5.56)
safe=2	-0.021	0.003	0.000	0.025**	0.020
	(-1.60)	(0.40)	(0.04)	(2.22)	(1.46)
safe=3	-0.021	-0.004	-0.005	0.021	0.015
	(-1.25)	(-0.43)	(-0.32)	(1.61)	(1.29)
safe=4	-0.033*	-0.004	-0.012	0.016	0.007
	(-1.85)	(-0.37)	(-0.82)	(1.20)	(0.55)
safe=5	-0.057***	-0.015	-0.039**	-0.015	-0.008
	(-3.06)	(-1.42)	(-2.34)	(-1.23)	(-0.54)
safe=6	-0.080***	-0.038***	-0.060***	-0.032**	-0.033*
	(-3.87)	(-3.05)	(-2.92)	(-2.12)	(-1.97)
strgov=2	0.016	0.019	0.023*	0.022*	0.035***
	(1.20)	(1.61)	(1.81)	(2.05)	(3.39)
strgov=3	0.007	0.017	0.012	0.023*	0.033**
	(0.62)	(1.39)	(0.94)	(2.06)	(2.32)
strgov=4	0.002	0.029**	0.015	0.022*	0.029**
	(0.14)	(2.29)	(1.09)	(1.81)	(2.27)
strgov=5	-0.021	0.027*	-0.009	0.000	0.007
	(-1.44)	(2.09)	(-0.67)	(0.04)	(0.48)
strgov=6	-0.046***	0.013	-0.036***	-0.022	-0.019
	(-3.01)	(1.04)	(-3.13)	(-1.73)	(-1.36)
trad=2	-0.010	0.001	0.001	0.003	0.008
	(-1.19)	(0.17)	(0.14)	(0.33)	(1.36)
trad=3	-0.029**	0.001	-0.007	-0.005	0.006
	(-2.35)	(0.06)	(-0.57)	(-0.57)	(0.75)
trad=4	-0.039***	-0.012	-0.021	-0.005	0.002
	(-3.05)	(-1.14)	(-1.72)	(-0.67)	(0.29)
trad=5	-0.053***	-0.018	-0.039**	-0.027**	-0.023***
	(-4.50)	(-1.59)	(-2.88)	(-2.86)	(-3.27)
trad=6	-0.061***	-0.030***	-0.048***	-0.040***	-0.046***
	(-6.07)	(-3.52)	(-4.26)	(-4.15)	(-5.11)

rule=2	-0.023***	0.002	-0.013**	0.010	0.003
	(-3.28)	(0.19)	(-2.12)	(1.54)	(0.42)
rule=3	-0.034***	-0.008	-0.027***	0.008	0.005
	(-4.04)	(-0.99)	(-3.38)	(1.00)	(0.51)
rule=4	-0.046***	-0.021*	-0.041***	-0.000	-0.004
	(-4.54)	(-2.07)	(-3.93)	(-0.05)	(-0.44)
rule=5	-0.054***	-0.030***	-0.051***	-0.005	-0.013
	(-5.93)	(-3.26)	(-5.89)	(-0.63)	(-1.09)
rule=6	-0.054***	-0.045***	-0.049***	-0.023*	-0.030**
	(-4.40)	(-4.13)	(-3.56)	(-1.83)	(-2.42)
left/right	-0.027***	-0.012***	-0.025***	-0.012***	-0.016***
pol.orientation	(-6.88)	(-4.69)	(-6.95)	(-3.31)	(-3.36)
N	93756.000	93756.000	93756.000	93756.000	93756.000

Source: ESS data file round 6 - 9
* p<0.10, ** p<0.05, *** p<0.010

The coefficients of all age brackets reveal that an increase in age has an increasingly negative effect on the opinion on immigration, being significant for the opinion on immigrants from poor countries, from the same and from different ethnic groups. Furthermore, the findings suggest that males are more averse towards immigration from poorer countries and their perceived impact on culture. Yet, males perceive the impact of immigrants on the economy as significantly more positive than female individuals, which could be explained through working experiences male natives have with immigrant workers. In line with Hatton's (2016), findings, natives have a significantly worse opinion on immigration overall than non-natives, whereas being part of an ethnic minority has no significant impact on immigration opinion.

Analyzing the results of the economic fear related variables, we find that education has a significant and positive effect on the overall opinion on immigration (column 1 to 5), growing in magnitude with increasing education levels. This result is in line with expectations and underlines the economic fear hypothesis: highly educated individuals feel less threatened by low-skilled immigrants than individuals with a low level of education. Moreover, feelings of economic insecurity result in a significantly negative effect on the overall opinion on immigration. The economic fear hypothesis is further supported by the finding that being a participant of the labor force (either being an active part of it or unemployed but seeking employment) negatively affects all five dependent variables, most likely because they experience a stronger competition between themselves and immigrants. The coefficients of the deciles along the income distribution become more positive when moving from bottom to top deciles, gaining in magnitude and

significance along the way. This result is in line with the theory that individuals at the bottom of society feel more threatened from immigration and are therefore less in favor of it, while it contradicts the theory of welfare concerns regarding potential tax implication for high-income individuals on an individual-level.

Regarding the variables that are related to cultural values, the estimation output suggests a significantly positive relationship between religiousness and the overall opinion on immigration, while the self-placement on the left-right political orientation scale exhibits a highly significant but negative coefficient. The latter indicates that people who place themselves towards the right end of the scale are less in favor of immigration and its consequences. Individuals who value safety a lot (safe = 6) have a significantly more negative attitude towards immigration. The results are more polarized for the preference towards a strong government: individuals who do not fancy a strong government have a more positive opinion on immigrants' impact on the economy and on culture, whereas individuals who do fancy a strong government are significantly less in favor of immigration from poorer countries or from a different ethnicity. Being in favor of traditions and customs has an increasingly negative effect on the attitude towards immigration, especially from poor countries. A similar pattern is observed for the importance of obeying rule. All in all, the results highlight how individuals with a high propensity towards authoritarian values are significantly less in favor of immigration.

In conclusion, the individual-level regression points out that economic fears, cultural values and socioeconomic variables are shaping the public opinion on immigration. Hence, both hypotheses designed to explain immigration opinion on an individual level can be verified in the context of the European migrant crisis. Despite controlling for individual characteristics and the time dimension, the country-fixed effects found in the individual-level regression are significant for most countries with varying signs (Table 4, Appendix C). Seemingly, not only the composition of individuals within a country determines public opinion on immigration, but also

macro-level factors. Hence, the following paragraphs will summarize the findings of including macro-level variables into the model to account for the country variation.

Macro-level Effects on the Overall Perception of Immigration

The scarce literature on multilevel cross-sectional studies examining the impact of macro-level variables on immigration opinion only found mixed or weak evidence of their role. (Hatton, 2016; Sides & Citrin, 2007). Moreover, only very few models consider their variation over time. This paper will contribute to this literature by adding a time-dimension to a multilevel cross-sectional regression model (Equation 2). In a first step, each of the 5 macro-level variables in Z_{ic} is added individually to the five baseline regression equations (Table 5). In a second step, three macro-level variables are simultaneously included into the regression and finally, the coefficients of all macro-level variables included simultaneously are estimated (Table 6).

Table 5: Correlates of immigration opinion on a macro-level

	(1) Poor countries	(2) Same ethnicity	(3) Different ethnicity	(4) Improve economy	(5) Enrich culture
foreign	0.165	0.374	1.386	0.083	0.029
	(0.21)	(0.59)	(1.35)	(0.11)	(0.04)
stue	0.013	-0.002	0.009	-0.001	0.015
	(1.61)	(-0.29)	(1.20)	(-0.14)	(1.70)
socben	-0.007*	-0.011***	-0.006	-0.012***	-0.003
	(-1.82)	(-4.36)	(-1.48)	(-3.16)	(-0.51)
ftap	-0.040	-0.008	-0.021	-0.043	-0.029
	(-1.29)	(-0.48)	(-0.95)	(-1.34)	(-0.73)
lngdp	-0.086***	-0.051**	-0.068***	-0.038	-0.039**
	(-4.06)	(-2.45)	(-3.59)	(-1.63)	(-2.15)
N	93756.000	93756.000	93756.000	93756.000	93756.000

Source: ESS data file round 6 - 9
* p<0.10, ** p<0.05, *** p<0.010

As shown in Table 5, neither the share of foreigners in the population, nor the share of first-time asylum applicants, nor the short-term unemployment rate have a significant effect on the overall opinion on immigration. The logarithm of GDP p.c. is negative and significant for columns 1 to 3 and 5. It seems plausible to conclude that wealthier countries are less in favor of immigration as they have more wealth to lose. The share of social benefits in GDP is found to be significant for columns 1, 2 and 4 with a negative sign for all three coefficients, implying an adverse relationship between the extent of social welfare spending and the opinion on immigration and the perceived impact on the economy. The coefficient being insignificant for the perceived impact of immigrants on culture is in line with the economic fear hypothesis, as the

extent of the social welfare state has no cultural implications. Even more, this finding underlines the existence of social welfare concerns among the population regarding immigration.

Table 6: The effect of multiple macro-level variables on immigration opinion.

	(1) Poor countries	(2) Same ethnicity	(3) Different ethnicity	(4) Improve economy	(5) Enrich culture
foreign	0.289	0.424	1.532	0.168	0.203
	(0.32)	(0.64)	(1.37)	(0.21)	(0.25)
ftap	-0.037	-0.004	-0.007	-0.041	-0.027
	(-1.05)	(-0.21)	(-0.26)	(-1.30)	(-0.64)
lngdp	-0.082***	-0.052**	-0.067***	-0.033	-0.031*
	(-3.83)	(-2.33)	(-3.07)	(-1.34)	(-2.08)
stue	0.015*	0.000	0.011	0.001	0.016*
	(2.09)	(0.02)	(1.48)	(0.07)	(1.89)
lngdp	-0.102***	-0.065***	-0.081***	-0.053***	-0.050***
	(-7.05)	(-7.01)	(-5.59)	(-6.11)	(-5.18)
socben	-0.011***	-0.013***	-0.009**	-0.013***	-0.006
	(-3.12)	(-5.08)	(-2.28)	(-3.99)	(-1.63)
socben	-0.011***	-0.013***	-0.010**	-0.015***	-0.008**
	(-3.47)	(-5.40)	(-2.31)	(-6.52)	(-2.21)
ftap	-0.034	-0.001	-0.016	-0.035	-0.025
	(-1.30)	(-0.16)	(-0.72)	(-1.37)	(-0.64)
lngdp	-0.094***	-0.065***	-0.075***	-0.049***	-0.039***
	(-5.52)	(-8.52)	(-4.97)	(-11.80)	(-4.33)
ftap	-0.042	-0.001	-0.021	-0.031	-0.030
	(-1.60)	(-0.17)	(-1.23)	(-1.20)	(-0.84)
stue	0.010	-0.002	0.007	-0.007	0.008*
	(1.13)	(-0.24)	(0.80)	(-1.64)	(1.96)
socben	-0.009**	-0.011***	-0.008*	-0.014***	-0.007**
	(-2.51)	(-4.26)	(-1.93)	(-5.49)	(-2.81)
crisis	0.059***	0.008	-0.007	0.001	-0.014
	(4.45)	(0.71)	(-0.46)	(0.08)	(-1.33)
lngdp	-0.099***	-0.067***	-0.082***	-0.048***	-0.043***
	(-6.08)	(-6.34)	(-4.96)	(-8.62)	(-6.48)
socben	-0.012***	-0.014***	-0.012**	-0.016***	-0.008***
	(-3.19)	(-5.10)	(-2.67)	(-6.47)	(-3.17)
ftap	-0.037	0.009	-0.002	-0.020	-0.027
	(-1.28)	(0.67)	(-0.11)	(-0.75)	(-0.73)
foreign	0.390	1.032	1.800	1.061*	0.253
	(0.47)	(1.47)	(1.60)	(1.91)	(0.41)
stue	0.011	-0.002	0.006	-0.008**	0.008**
	(1.47)	(-0.36)	(0.73)	(-2.19)	(2.14)
N	93756.000	93756.000	93756.000	93756.000	93756.000

Source: ESS data file round 6 - 9
* p<0.10, ** p<0.05, *** p<0.010

The results of including multiple macro-level variables simultaneously into the model confirm that the share of foreigners and of first-time asylum applicants in the population as well as the short-term unemployment rate are insignificant in almost all combinations. On the other hand, the significance of social benefits in GDP and GDP p.c. is reconfirmed, even though their significance regarding certain dependent variables changes depending on the other macro-level variables included with them. Those deviations are not surprising, since the model captures a lot of country-variation with only few macro-level variables. A negative coefficient for the short-term unemployment rate on the perceived impact on the economy is in line with common sense, implying that a country with higher unemployment rates perceives immigrants more as a threat on the labor market. Social benefits in GDP and the logarithm of GDP per capita remain highly significant and negative for all dependent variables, while the share of first-time asylum applicants and foreigners remains highly insignificant. This finding is highly interesting, as it

indicates that the state of the economy and its welfare system are more important t0 immigration opinion than the share of immigrants in the population.

As the predictive power of short-term unemployment, first time asylum applicants and share of foreigners is limited and circumstantial in its significance, the analysis will continue with a more parsimonious model including only social benefits in GDP and GDP p.c. Table 7 contains the estimates: jointly, both macro-level variables exhibit only negative coefficients that are highly significant except for the impact of social benefits in GDP on the perceived effect of immigration on culture. Again, the changes in significance must be taken with caution as they are circumstantial.

Table 7: Final individual- and macro level model on immigration opinion

	(1) Poor countries	(2) Same ethnicity	(3) Different ethnicity	(4) Improve economy	(5) Enrich culture
crisis	0.041**	0.023**	0.000	0.022*	-0.029*
	(2.51)	(2.55)	(0.01)	(1.88)	(-2.06)
lngdp	-0.097***	-0.065***	-0.077***	-0.053***	-0.044***
	(-5.45)	(-8.54)	(-4.94)	(-8.32)	(-3.60)
socben	-0.009**	-0.013***	-0.008*	-0.013***	-0.004
	(-2.25)	(-5.53)	(-1.82)	(-3.50)	(-0.67)
N	93756.000	93756.000	93756.000	93756.000	93756.000

Source: ESS data file round 6 - 9
* p<0.10, ** p<0.05, *** p<0.010

In order to answer the second research question on how the public opinion on immigration shifted during the migrant crisis, the coefficient of the crisis dummy after controlling for all significant individual- and macro-level variables as well as country-fixed affects is very informative: being significant and positive for column 1,2 and 4, the coefficients of the crisis dummy suggest that the attitude on immigration did improve as well as the perceived impact of immigrants on the economy of the receiving country. Solely the perceived impact on culture significantly worsened during the European migrant crisis.

In conclusion, the estimations highlight that the macro-level variables yield important implications regarding the public opinion on immigration: GDP p.c. and social benefits to GDP do play significant role in contrast to the short-term unemployment, the share of foreigners and the share of first-time asylum applicants. These findings emphasize structural rather than cyclical components and downplay the relevance of migrant-related figures in shaping immigration opinion. They point out that countries with a higher share in foreigners or first-time asylum

applicants are neither significantly more averse nor more in favor of immigration. Finally, the results indicate that the attitude on immigration (columns 1 and 2) did significantly improve during the European migrant crisis, as did the perceived impact of immigrants on the economy. Yet, they also suggest that the perceived impact on culture worsened over the course of the migrant crisis.

Impact of the European Migrant Crisis on the Magnitude of the Key Factors

On an individual-level, the interaction terms between the following individual-level variables and the crisis dummy were found to be significant: gender, economic insecurity, education and age. The results are summarized in Table 8. For gender, the interaction term was significant and negative for columns 1 and 4, implying that the attitude of a male individual towards immigration from poorer countries and their perceived impact on the economy did worsen over the course of the migrant crisis. According to the interaction term of economic insecurity and the crisis, individuals experiencing subjective economic insecurity think lesser of immigrants' impact on the culture after the migrant crisis. The opinion of highly educated individuals on immigration from the same ethnic group and their perceived impact on the economy did worsen compared to pre-crisis levels, whereas the opinion of low educated individuals on the perceived impact of immigrants on culture and economy did improve after the crisis. These findings suggest that labor market concerns of low-skill natives might not be the main factor shaping the public attitude on immigration in the context of the European migrant crisis, whereas the importance of welfare concerns in form of potential tax implications for high-skill natives become stronger. The interaction term for social benefits in GDP is not significant. By contrast, the interaction term estimate for GDP per capita. is significant and positive for columns 1, 3 and 5. This finding suggests that the negative impact of an increase in GDP per capita is attenuated after the peak of the crisis. Strikingly, after adding the interaction term, the main effect of the crisis dummy turned negative for all dependent variables, only being significant for columns 1

($\theta = -0.827$), 3 ($\theta = -0.943$) and 5 ($\theta = -0.963$). Considering that the coefficients of the interaction terms for column 1, 3 and 5 were $\theta = 0.0849$, $\theta = 0.092$ and $\theta = 0.0914$, while the average level of GDP p.c. is 10.15, it becomes evident that all countries with a level of GDP p.c. above average improved their opinion on immigration from poor countries and their perceived impact on culture over the crisis in contrast to countries with a GDP p.c. below average.

Table 8: Change in the magnitude of explanatory variables during the European migrant crisis (significant estimates)

	(1) Poor countries	(2) Same ethnicity	(3) Different ethnicity	(4) Improve economy	(5) Enrich culture
highedcrisis	0.003	-0.016*	-0.002	-0.023**	0.017
	(0.25)	(-1.95)	(-0.24)	(-2.44)	(1.57)
medium edu.	0.049***	0.075***	0.069***	0.065***	0.058***
	(6.09)	(9.19)	(7.78)	(7.65)	(6.38)
high edu.	0.165***	0.173***	0.191***	0.197***	0.147***
	(11.26)	(13.88)	(14.34)	(14.78)	(8.96)
lowedcrisis	0.021	0.019	0.016	0.028*	0.026**
	(1.06)	(1.06)	(0.85)	(2.11)	(2.74)
medium edu.	0.059***	0.083***	0.076***	0.078***	0.069***
	(4.70)	(7.32)	(5.84)	(6.31)	(6.84)
high edu.	0.176***	0.173***	0.197***	0.199***	0.166***
	(12.39)	(13.00)	(14.06)	(14.24)	(11.96)
sexcrisis	-0.015*	-0.009	-0.010	-0.022**	-0.009
	(-1.76)	(-1.21)	(-1.24)	(-2.79)	(-1.28)
sex	-0.011	-0.005	-0.006	0.031***	-0.019**
	(-1.32)	(-0.63)	(-0.55)	(3.38)	(-2.60)
ecincrisis	-0.017	0.008	-0.019	-0.005	-0.029*
	(-0.91)	(0.54)	(-1.38)	(-0.24)	(-1.88)
ecoinsec	-0.044***	-0.072***	-0.052***	-0.064***	-0.036**
	(-3.05)	(-7.80)	(-5.31)	(-4.18)	(-2.44)
youngcrisis	0.135***	0.056***	0.115***	-0.007	0.019
	(8.49)	(3.81)	(5.96)	(-0.38)	(1.22)
32-43	0.086***	0.020	0.067***	-0.018	0.014
	(6.67)	(1.52)	(4.13)	(-1.25)	(1.10)
44-55	0.068***	0.014	0.049***	-0.020	0.010
	(8.38)	(1.26)	(4.18)	(-1.69)	(1.05)
56-67	0.035***	0.011	0.033***	-0.016*	0.001
	(4.72)	(1.30)	(4.02)	(-1.97)	(0.22)
68-100	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
oldcrisis	-0.135***	-0.056***	-0.115***	0.007	-0.019
	(-8.49)	(-3.81)	(-5.96)	(0.38)	(-1.22)
32-43 y~s	-0.049***	-0.036***	-0.049***	-0.011	-0.005
	(-6.68)	(-5.76)	(-6.81)	(-1.34)	(-0.68)
44-55 y~s	-0.067***	-0.042***	-0.067***	-0.013	-0.008
	(-5.57)	(-5.61)	(-5.79)	(-1.19)	(-0.69)
56-67 y~s	-0.100***	-0.046***	-0.082***	-0.009	-0.017
	(-7.04)	(-4.26)	(-5.41)	(-0.57)	(-1.25)
68-100 ~s	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
crisis	-0.827***	-0.253	-0.943***	-0.282	-0.963***
	(-3.20)	(-1.35)	(-3.39)	(-1.02)	(-3.17)
gdpcrisis	0.085***	0.027	0.092***	0.030	0.091***
	(3.40)	(1.50)	(3.46)	(1.10)	(3.11)
lngdp	-0.193***	-0.096***	-0.182***	-0.086**	-0.148***
	(-5.34)	(-3.72)	(-4.69)	(-2.51)	(-3.83)
N	93756.000	93756.000	93756.000	93756.000	93756.000

* p<0.10, ** p<0.05, *** p<0.010

In conclusion, the findings reveal that the European migrant crisis did alter the magnitude by which age, gender, economic insecurity, education and GDP p.c. affect the public opinion on immigration Ultimately, the main effect of the crisis dummy and the coefficient of the interaction term with GDP p.c. indicate that for countries with a GDP below average the opinion on immigrants worsened during the migrant crisis, while it improved for countries with a GDP above average.

6. Conclusion

This paper examined four rounds of ESS data from 2012 until 2018 in order to explore how the European migrant crisis affected the public opinion on immigration and its key determining factors. The relevance of this paper is emphasized by future outlooks on migration predicting that the number of immigrants and asylum seekers arriving in Europe is more likely to increase in the future, rather than decrease (IOM, 2018).

The findings in chapter 5 contain interesting information on the three research questions. First, the data reconfirmed existing literature showing, on an individual-level, that understanding differences among countries' perceptions over immigrants entail understanding the composition of their population in terms of socioeconomic variables but also in terms of economic fears and cultural values. Economic fears are mostly driven by the fear of labor market competition on the low-skill job market and welfare concerns in form of tax implications, whereas cultural values that negatively affect immigration opinion cement themselves in the form of authoritarian values rather than religiousness. On a macro-level, the share of foreigners or asylum applicants in a country is irrelevant in shaping immigration opinion, while the economic situation and the extent of the social welfare state are key factors. Second, it becomes evident that even after controlling for individual- and macro level determinants, as well as country-fixed affects, the time dimension, capturing the shock of the European migrant crisis, exhibits a significantly positive sign for the public opinion on immigration, except for the perceived impact of immigrants on culture. These results are interesting in that they indicate people becoming increasingly more positive towards immigrants, yet the cultural differences leave a mark on their opinion. Finally, the model also reveals that changes in magnitude of certain variables occurred during the migrant crisis, showing that the magnitude of age, gender, economic insecurity and education and impact of GDP p.c. were altered. Seemingly, individuals that are more likely to compete with immigrants on the labor market or for a fixed supply of

welfare payments such as elderly, male or economically troubled individuals have been, on average, more affected in their opinion on immigration by the European migrant crisis. However, it is astounding to find that low-skilled individuals improved their opinion on immigration over the course of the crisis, while the opinion of high-skilled individuals worsened. This finding implies that it might be welfare concerns in form of potential tax implications that became more important because of the crisis. This explanation is supported on a macro-level, with the coefficient of social benefits in GDP being significantly negative. As outlined in chapter 3, immigrants, even in extreme scenarios such as the migrant crisis in Europe, are likely to provide a boost to GDP and other economic variables in the long-run. Hence, those arguments should be emphasized much stronger to address welfare and by that also immigration concerns.

There are a number of limitations to this analysis. To begin with, the estimations of the macro-level regression coefficients are circumstantial as they differ between adding one variable at a time and multiple variables. Therefore, they must be interpreted with caution. While a simple internal validity check has been conducted (Appendix A), which supports the main findings of chapter 5, future research is advised to address the external validity of the model using alternative data sources. Finally, the model offers insights on the relationship between the independent variables and immigration opinion, yet the causality of their relationship has not been inferred.

This paper offers several avenues for future research. One interesting avenue has been introduced by Hatton (2017), suggesting that salience is highly relevant for shaping the attitude towards immigration. Accordingly, including a variable capturing the salience of immigration in form of media coverage on immigration into the regression model estimated in this paper might be very conclusive.

The finding that the overall opinion on immigration improved stands in contrast to a media narrative (Hatton, 2017) that gradually replaced a sympathetic and empathetic response to the refugee crisis with suspicion and hostility towards asylum seekers and immigrants (Georgiou & Zaborowski, 2017), sometimes even promoting hate speech and Euroscepticism (Harteveld, Schaper, De Lange, & Van Der Brug, 2018). Hence, the results of this paper give hope that Europe is not going to break under the challenge that immigration does pose and will continue posing in the future. Especially because immigrants will be vital in the future to advance the European economy, not to threaten it.

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Appendix A: Internal Validity Check. Heterogeneity across Socioeconomic Groups

As the estimates for the macro-level variables are circumstantial to the macro-level variables included with them, it is likely to assume that the macro-level factors shaping the public opinion on immigration might alter across different socioeconomic groups. In order to examine whether macro-level variables affect different socioeconomic groups differently, the following section aims on reconfirming the internal validity of the model applied in chapter 5 by analyzing whether the explanatory power of macro-level variables is changing across different types of individuals. Following Hatton (2016), the sample population was divided into several socioeconomic groups which were entered in the regression equation in form of interaction terms with the two significant macro-level variables, GDP per capita and social benefits in GDP. The following regression equation was estimated:

$$Y_{ic} = X_{ic}\alpha + Z_{ic}\beta + X_{ic}Z_{ic}\delta + \gamma_c + crisis_i\eta + \epsilon_{ic} \quad (4)$$

Where $Z_{ic}$is comprised of the two main significant macro-level variables GDP per capita and social benefits in GDP. X_{ic} includes all individual-level variables from the previous chapter. $X_{ic}Z_{ic}$ consists of interaction terms between the macro-level variables and the individual-level variables that were the most significant (Hatton 2016): education (low and high education), income (top or bottom income), gender, labor market participation and authoritarian values (traditions and rules). The estimates of δ are summarized in Table 9.

The interaction term of high education with GDP p.c. is significant and positive for the perceived impact on culture, economy and the opinion on immigration from poor countries. The main effect of GDP p.c. remains highly significant and negative in all columns, implying that higher levels of education mitigate the negative main effect of an increase in GDP p.c. for column 1, 4 and 5. The only significant coefficient for the interaction between high education and social benefits in GDP is for column 5, indicating that higher education attenuates the negative

impact of social benefits in GDP on the perceived impact on the economy. The interaction coefficient of social benefits in GDP and low education is entirely insignificant, while the interaction for GDP p.c. is significant and negative for the perceived impact on culture and the economy. In conclusion, higher levels of education slightly mitigate the negative impact of GDP p.c. on the opinion on immigration, while low levels of education increase the magnitude of GDP p.c. This finding comes intuitive, as it is low-skilled workers who will mostly compete with the immigrants on the labor market and therefore fear economic consequences. Strikingly, the coefficients of the interaction terms including low and high income were not significant at all. Seemingly, the magnitude of the impact GDP p.c. and social benefits in GDP are having on the overall opinion on immigration appears to be not significantly different among individuals at the top and at the bottom of the income distribution. By contrast, being male has a significantly negative impact on the perception of immigrants from poorer countries in interaction with GDP p.c., indicating that an increase in a country's GDP does affect the male opinion on immigration from poor countries significantly stronger than the female opinion.

While the economic fear hypothesis strongly suggests otherwise, being a labor market participant does not significantly alter the magnitude of GDP p.c. and social benefits in GDP. Finally, the interaction term between favoring traditions and social benefits in GDP is negative and significant for columns 1 to 3, while the interaction term with GDP p.c. is negative and significant for columns 1,3 and 5. Those findings suggest that the effect of an increase in social benefits in GDP and GDP p.c. is increasingly more negative among individuals with a stronger tendency towards authoritarianism, implying that more authoritarian individuals have a lesser opinion on immigration. This finding is supported by the interaction term between the importance of rules and the macro-level variables, with the coefficient related to GDP p.c. being slightly significant and negative for the attitude towards migrants from poorer countries.

In conclusion, the results confirm the idea that the magnitude of the macro-level variables does vary among certain socioeconomic groups. Moreover, they also reconfirm the results from chapter 5. Furthermore, they underline the internal validity of the model: despite a variation in magnitude, the relationship between GDP p.c. and social benefits in GDP with the dependent remains negative across different socioeconomic groups.

Table 9: Macro-level heterogeneity across socioeconomic groups

	(1) Poor countries	(2) Same ethnicity	(3) Different ethnicity	(4) Improve economy	(5) Enrich culture
crisis	0.041**	0.023**	0.000	0.022*	-0.029*
	(2.50)	(2.56)	(0.00)	(1.86)	(-2.08)
lngdp	-0.103***	-0.064***	-0.081***	-0.058***	-0.053***
	(-5.76)	(-9.29)	(-5.33)	(-8.88)	(-3.92)
socben	-0.010**	-0.013***	-0.009*	-0.014***	-0.004
	(-2.44)	(-5.47)	(-2.00)	(-3.85)	(-0.62)
High edu /	0.024*	-0.004	0.016	0.019*	0.034***
GDP	(2.09)	(-0.36)	(1.65)	(1.78)	(3.77)
High edu/	0.002	0.001	0.002	0.004**	-0.001
socben	(1.20)	(0.39)	(1.44)	(2.66)	(-0.49)
crisis	0.040**	0.022**	-0.000	0.022*	-0.030*
	(2.48)	(2.53)	(-0.01)	(1.81)	(-2.09)
lngdp	-0.088***	-0.060***	-0.069***	-0.038***	-0.029**
	(-4.89)	(-5.03)	(-3.93)	(-4.73)	(-2.62)
socben	-0.009*	-0.013***	-0.008	-0.012***	-0.004
	(-2.03)	(-5.44)	(-1.68)	(-3.20)	(-0.58)
Low edu/	-0.019	-0.013	-0.018	-0.031**	-0.034**
GDP	(-1.45)	(-0.87)	(-1.26)	(-2.16)	(-2.21)
Low edu/	-0.001	-0.000	-0.001	-0.002	-0.001
socben	(-0.77)	(-0.15)	(-0.54)	(-0.74)	(-0.47)
crisis	0.041**	0.023**	0.000	0.023*	-0.029*
	(2.51)	(2.55)	(0.01)	(1.88)	(-2.06)
lngdp	-0.096***	-0.065***	-0.076***	-0.054***	-0.044***
	(-5.64)	(-8.00)	(-5.01)	(-8.76)	(-3.58)
socben	-0.009**	-0.013***	-0.008*	-0.013***	-0.004
	(-2.13)	(-5.67)	(-1.80)	(-3.41)	(-0.65)
Low income/	-0.001	0.001	0.000	-0.000	-0.000
socben	(-0.73)	(0.63)	(0.17)	(-0.16)	(-0.75)
Low income/	-0.002	-0.001	-0.007	0.008	0.003
GDP	(-0.16)	(-0.06)	(-0.61)	(0.82)	(0.34)
crisis	0.041**	0.023**	0.000	0.022*	-0.029*
	(2.50)	(2.56)	(0.00)	(1.86)	(-2.07)
lngdp	-0.097***	-0.064***	-0.078***	-0.053***	-0.045***
	(-5.13)	(-9.01)	(-4.78)	(-7.62)	(-3.62)
socben	-0.010**	-0.013***	-0.009*	-0.013***	-0.004
	(-2.37)	(-5.46)	(-1.91)	(-3.64)	(-0.69)
High income/	0.002	0.000	0.002	0.002	0.001
socben	(1.18)	(0.08)	(1.12)	(1.19)	(0.54)
High income	0.001	-0.005	0.003	0.003	0.004
GDP	(0.05)	(-0.45)	(0.22)	(0.23)	(0.32))
crisis	0.041**	0.023**	0.000	0.022*	-0.029*
	(2.52)	(2.55)	(0.01)	(1.88)	(-2.06)
lngdp	-0.090***	-0.062***	-0.074***	-0.055***	-0.044***
	(-4.90)	(-7.32)	(-4.26)	(-6.97)	(-3.27)
socben	-0.009**	-0.013***	-0.008*	-0.013***	-0.005
	(-2.24)	(-5.29)	(-1.80)	(-3.49)	(-0.77)
Gender/	-0.000	-0.000	0.000	0.000	0.001
socben	(-0.06)	(-0.15)	(0.12)	(0.12)	(1.10)
Gender/	-0.015**	-0.006	-0.007	0.005	-0.000
GDP	(-2.23)	(-1.20)	(-0.92)	(0.64)	(-0.06)

crisis	0.041**	0.023**	0.000	0.022*	-0.029*
	(2.51)	(2.55)	(0.01)	(1.88)	(-2.06)
lngdp	-0.097***	-0.059***	-0.073***	-0.054***	-0.050***
	(-4.89)	(-7.20)	(-4.82)	(-6.15)	(-3.65)
socben	-0.010**	-0.012***	-0.009*	-0.013***	-0.005
	(-2.40)	(-5.33)	(-1.93)	(-3.52)	(-0.74)
Labor Market	0.001	-0.011	-0.006	0.002	0.011
Part./GDP	(0.10)	(-1.31)	(-0.86)	(0.24)	(1.45)
Labor Market	0.001	-0.001	0.001	-0.001	0.001
Part/socben	(1.09)	(-0.82)	(0.70)	(-0.45)	(0.67)
crisis	0.041**	0.023**	0.000	0.023*	-0.029*
	(2.54)	(2.57)	(0.03)	(1.88)	(-2.05)
lngdp	-0.066***	-0.055***	-0.049***	-0.046**	-0.019
	(-3.67)	(-5.27)	(-2.94)	(-2.48)	(-1.55)
socben	-0.006	-0.010***	-0.005	-0.010**	-0.002
	(-1.40)	(-3.92)	(-1.00)	(-2.56)	(-0.39)
Tradition/	-0.001**	-0.001**	-0.001**	-0.001	-0.000
Socben	(-2.55)	(-2.38)	(-2.49)	(-1.70)	(-1.05)
Tradition/	-0.008*	-0.003	-0.007**	-0.002	-0.006**
GDP	(-2.07)	(-0.97)	(-2.22)	(-0.45)	(-2.75)
crisis	0.041**	0.023**	0.000	0.023*	-0.029*
	(2.55)	(2.57)	(0.03)	(1.88)	(-2.07)
lngdp	-0.069***	-0.057***	-0.052***	-0.051***	-0.039***
	(-3.66)	(-4.51)	(-3.06)	(-5.67)	(-3.27)
socben	-0.007	-0.012***	-0.007	-0.011**	-0.004
	(-1.39)	(-5.03)	(-1.38)	(-2.73)	(-0.54)
Rules/	-0.001	-0.000	-0.000	-0.000	-0.000
Socben	(-1.65)	(-0.75)	(-0.69)	(-1.09)	(-0.25)
Rules/	-0.009*	-0.002	-0.008	-0.000	-0.001
GDP	(-2.00)	(-0.75)	(-1.59)	(-0.15)	(-0.45)
N	93756.000	93756.000	93756.000	93756.000	93756.000

Source: ESS data file round 6 - 9
* p<0.10, ** p<0.05, *** p<0.010

Appendix B: Variables and Coding used in the Analysis

Table 10: Summary of variables used in the model

Variable	Topic	Scale and Source
Dependent Variables		
patmfpc	Positive attitude towards immigrants from poor countries outside of Europe	ESS 6 – 9: (1) = Yes, (0) = No Based on impcntr (1 – 2 = Yes, 3 – 4 = No)
patmfse	Positive attitude towards immigrants from the same ethnic group	ESS 6 – 9: (1) = Yes, (0) = No Based on imsmetn (1 – 2 = Yes, 3 – 4 = No)
patmfde	Positive attitude towards immigrants from a different ethnic group	ESS 6 – 9: (1) = Yes, (0) = No Based on impcntr (1 – 2 = Yes, 3 – 4 = No)
imp_eco	Perceived impact of immigrants on the economy of the receiving country	ESS 6 – 9. Based on imbgeco: Scale from (0) = "Bad for economy" to (10) = "Good for economy". (1) = Positive if imbgeco < 5, (0) = Negative if imbgeco >= 5
imp_cult	Perceived impact of immigrants on the culture of the receiving country	ESS 6 – 9. Based on imueclt: Scale from (0) = "Cultural life undermined" to (10) = "Cultural life enriched". (1) = Positive if imueclt < 5, (0) = Negative if imueclt >= 5
Individual-level Explanatory Variables		
crisis	Indicates if observation is from before or after the peak of the European migrant crisis	ESS 6 – 9: Based on essround. (1) = "After crisis" if essround >= 8, (0) = "Before crisis" if essround < 8
agebrack	Age of individual distributed into 5 age brackets that each comprise 20% of the entire population	ESS 6 – 9: based on agea. (1) if agea [15 -31], (2) if agea [32 – 43], (3) if agea [44 – 55], (4) if agea [56 – 67], (5) if agea [68 – 100]
sex	Male or non-male	ESS 6 – 9: based on gndr, (1) if male, (0) non-male
brncntr	Individual born in country	ESS 6 – 9: (1) = Yes, (0) = No
ethminor	Individual belongs to an ethnic minority	ESS 6 – 9: (1) = Yes, (0) = No
edulvla	Highest degree an individual obtained	ESS 6 – 9: based on eisced (highest education level on ISCED scale). (1) if eisced [1,2] "low", (2) if [3,5] "middle", (3) if eisced [6,7] "high"
ecoinsec	Self-perceived economic insecurity	ESS 6 – 9: based on hincfel. (1) if hincfel >= 3 (Feeling about household's

		income nowadays difficult or very difficult)
lbrforce	Individual participates in the labor force (either being employed or unemployed but seeking employment)	ESS 6 – 9: based on pdwrk and uempla. (1) if either pdwrk = 1 or uempla = 1
hinctnta	Household's total net income, all sources.	ESS 6 – 9: scale divided into deciles from 1 to 10.
religious	Individual is religious.	ESS 6 – 9: based on rlgdgr (scale from 1 to 10). (1) if rlgdgr > 5
safe	Individual importance of feeling safe	ESS 6 – 9: based on impsafe. Scale from 1 (not important) to 6 (very important).
strgov	Importance of having a strong government.	ESS 6 – 9: based on impstrgv. Scale from 1 (not important) to 6 (very important).
trad	Importance of following traditions and customs.	ESS 6 – 9: based on imptrad. Scale from 1 (not important) to 6 (very important).
rule	Importance of following rules.	ESS 6 – 9: Based on imprule. Scale from 1 (not important) to 6 (very important).
lrscale	Self-placement on the left right scale.	ESS 6 – 9: Scale from 0 (left) to 10 (right).
Macro-level Explanatory Variables		
socben	Social benefits to households, In cash / In kind, % of GDP, 20012 – 2018	OECD database
lngdp	Logarithm of the annual real GDP per capita, per country 2012 – 2018	Eurostat database
ftap	Share of first-time asylum applicants in population per country, 2012 – 2018	Eurostat database
foreign	Share of foreigners in population per country, 2012 – 2018	Eurostat database
stue	Short-term unemployment rate	OECD database

Appendix C: Country-fixed Effects

Table 4: Country-fixed effects at an individual level

	(1) Poor countries	(2) Same ethnicity	(3) Different ethnicity	(4) Improve economy	(5) Enrich culture
BE	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
CH	-0.003	0.067***	0.020***	0.197***	0.013***
	(-1.07)	(25.48)	(5.74)	(70.45)	(4.52)
CZ	-0.309***	-0.318***	-0.326***	-0.071***	-0.281***
	(-77.32)	(-134.56)	(-76.56)	(-17.50)	(-68.56)
DE	0.038***	0.105***	0.075***	0.133***	0.000
	(11.84)	(38.43)	(24.35)	(34.15)	(0.04)
EE	-0.240***	-0.037***	-0.148***	0.022***	-0.062***
	(-41.09)	(-7.85)	(-24.99)	(4.50)	(-14.32)
ES	0.011**	-0.067***	0.018***	0.137***	0.087***
	(2.12)	(-12.69)	(2.84)	(21.42)	(15.21)
FI	-0.191***	-0.074***	-0.128***	0.097***	0.145***
	(-59.87)	(-25.27)	(-41.21)	(31.14)	(44.02)
FR	-0.022***	0.000	0.007***	0.010***	-0.092***
	(-9.48)	(0.20)	(2.70)	(3.38)	(-38.18)
GB	-0.064***	-0.071***	0.005	0.078***	-0.079***
	(-22.29)	(-30.26)	(1.60)	(29.68)	(-39.10)
HU	-0.401***	-0.207***	-0.358***	-0.097***	-0.091***
	(-72.05)	(-58.80)	(-64.75)	(-17.70)	(-14.36)
IE	-0.012***	-0.058***	0.004	0.102***	0.011***
	(-3.33)	(-19.09)	(0.88)	(35.01)	(3.95)
LT	-0.199***	-0.103***	-0.099***	0.081***	-0.125***
	(-44.04)	(-28.42)	(-23.03)	(21.69)	(-27.68)
NL	-0.025***	-0.038***	0.049***	0.084***	0.041***
	(-10.37)	(-18.21)	(18.90)	(34.63)	(19.73)
NO	0.094***	0.054***	0.119***	0.142***	-0.009***
	(30.82)	(20.14)	(33.61)	(57.12)	(-3.34)
PL	0.001	-0.021***	-0.025***	0.140***	0.102***
	(0.11)	(-4.03)	(-4.00)	(26.74)	(15.87)
PT	-0.023***	-0.062***	-0.015**	0.102***	0.022***
	(-3.41)	(-10.69)	(-2.44)	(16.39)	(3.42)
SE	0.245***	0.140***	0.249***	0.102***	0.100***
	(64.90)	(39.94)	(56.15)	(25.67)	(21.34)
SI	-0.041***	0.013***	-0.002	-0.054***	-0.068***
	(-9.29)	(5.23)	(-0.43)	(-16.01)	(-17.29)
N	93756.000	93756.000	93756.000	93756.000	93756.000

Source: ESS data file round 6 - 9
* p<0.10, ** p<0.05, *** p<0.010

Appendix D: Regression Output of Interaction Terms

Table 11: Change in the magnitude of explanatory variables during the European migrant crisis (all estimates)

	(1) Poor countries	(2) Same ethnicity	(3) Different ethnicity	(4) Improve economy	(5) Enrich culture
lrcrisis	-0.005	-0.000	-0.004	-0.003	-0.004
	(-1.45)	(-0.10)	(-1.01)	(-1.68)	(-1.48)
lrscale	-0.025***	-0.011***	-0.023***	-0.011***	-0.014***
	(-5.65)	(-3.92)	(-5.61)	(-2.94)	(-3.17)
highedcrisis	0.003	-0.016*	-0.002	-0.023**	0.017
	(0.25)	(-1.95)	(-0.24)	(-2.44)	(1.57)
low edu.	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
medium edu.	0.049***	0.075***	0.069***	0.065***	0.058***
	(6.09)	(9.19)	(7.78)	(7.65)	(6.38)
high edu.	0.165***	0.173***	0.191***	0.197***	0.147***
	(11.26)	(13.88)	(14.34)	(14.78)	(8.96)
lowedcrisis	0.021	0.019	0.016	0.028*	0.026**
	(1.06)	(1.06)	(0.85)	(2.11)	(2.74)
low edu.	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
medium edu.	0.059***	0.083***	0.076***	0.078***	0.069***
	(4.70)	(7.32)	(5.84)	(6.31)	(6.84)
high edu.	0.176***	0.173***	0.197***	0.199***	0.166***
	(12.39)	(13.00)	(14.06)	(14.24)	(11.96)
sexcrisis	-0.015*	-0.009	-0.010	-0.022**	-0.009
	(-1.76)	(-1.21)	(-1.24)	(-2.79)	(-1.28)
sex	-0.011	-0.005	-0.006	0.031***	-0.019**
	(-1.32)	(-0.63)	(-0.55)	(3.38)	(-2.60)
relcrisis	-0.009	-0.015	-0.022	-0.013	-0.003
	(-0.56)	(-0.97)	(-1.12)	(-1.60)	(-0.27)
religious	0.049***	0.029***	0.042***	0.055***	0.042***
	(4.67)	(3.81)	(4.75)	(7.14)	(5.61)
rulecrisis	-0.004	0.003	-0.004	0.002	-0.001
	(-0.84)	(1.02)	(-1.01)	(0.66)	(-0.50)
1.rule	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
2.rule	-0.021***	-0.000	-0.011*	0.009	0.004
	(-2.94)	(-0.04)	(-1.75)	(1.40)	(0.51)
3.rule	-0.030***	-0.012	-0.023**	0.006	0.006
	(-3.60)	(-1.30)	(-2.47)	(0.75)	(0.65)
4.rule	-0.040***	-0.027**	-0.035**	-0.003	-0.002
	(-3.79)	(-2.14)	(-2.70)	(-0.35)	(-0.21)
5.rule	-0.047***	-0.037***	-0.043***	-0.008	-0.010
	(-3.81)	(-3.04)	(-3.31)	(-0.82)	(-0.77)
6.rule	-0.045**	-0.053***	-0.040*	-0.026*	-0.026*
	(-2.64)	(-3.29)	(-2.06)	(-1.79)	(-1.92)
tradcrisis	-0.006	0.001	-0.007	-0.002	-0.008
	(-1.19)	(0.22)	(-1.45)	(-0.49)	(-1.63)
1.trad	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
2.trad	-0.007	0.001	0.005	0.004	0.012
	(-0.73)	(0.10)	(0.51)	(0.41)	(1.68)
3.trad	-0.023	-0.000	0.000	-0.003	0.014
	(-1.59)	(-0.01)	(0.03)	(-0.33)	(1.28)
4.trad	-0.030*	-0.013	-0.010	-0.003	0.013
	(-1.80)	(-0.98)	(-0.61)	(-0.29)	(1.17)
5.trad	-0.041**	-0.020	-0.024	-0.023*	-0.008
	(-2.39)	(-1.28)	(-1.29)	(-2.03)	(-0.57)
6.trad	-0.047**	-0.032**	-0.030	-0.036***	-0.028
	(-2.75)	(-2.54)	(-1.58)	(-3.19)	(-1.67)
ecincrisis	-0.017	0.008	-0.019	-0.005	-0.029*
	(-0.91)	(0.54)	(-1.38)	(-0.24)	(-1.88)
ecoinsec	-0.044***	-0.072***	-0.052***	-0.064***	-0.036**

	(-3.05)	(-7.80)	(-5.31)	(-4.18)	(-2.44)
youngcrisis	0.135***	0.056***	0.115***	-0.007	0.019
	(8.49)	(3.81)	(5.96)	(-0.38)	(1.22)
15-31	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
32-43	0.086***	0.020	0.067***	-0.018	0.014
	(6.67)	(1.52)	(4.13)	(-1.25)	(1.10)
44-55	0.068***	0.014	0.049***	-0.020	0.010
	(8.38)	(1.26)	(4.18)	(-1.69)	(1.05)
56-67	0.035***	0.011	0.033***	-0.016*	0.001
	(4.72)	(1.30)	(4.02)	(-1.97)	(0.22)
68-100	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
oldcrisis	-0.135***	-0.056***	-0.115***	0.007	-0.019
	(-8.49)	(-3.81)	(-5.96)	(0.38)	(-1.22)
15-31 y~s	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
32-43 y~s	-0.049***	-0.036***	-0.049***	-0.011	-0.005
	(-6.68)	(-5.76)	(-6.81)	(-1.34)	(-0.68)
44-55 y~s	-0.067***	-0.042***	-0.067***	-0.013	-0.008
	(-5.57)	(-5.61)	(-5.79)	(-1.19)	(-0.69)
56-67 y~s	-0.100***	-0.046***	-0.082***	-0.009	-0.017
	(-7.04)	(-4.26)	(-5.41)	(-0.57)	(-1.25)
68-100 ~s	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
crisis	-0.827***	-0.253	-0.943***	-0.282	-0.963***
	(-3.20)	(-1.35)	(-3.39)	(-1.02)	(-3.17)
gdpcrisis	0.085***	0.027	0.092***	0.030	0.091***
	(3.40)	(1.50)	(3.46)	(1.10)	(3.11)
lngdp	-0.193***	-0.096***	-0.182***	-0.086**	-0.148***
	(-5.34)	(-3.72)	(-4.69)	(-2.51)	(-3.83)
socrisis	0.003	0.001	0.003	0.002	0.001
	(1.22)	(1.44)	(1.18)	(1.10)	(0.66)
socben	-0.013**	-0.014***	-0.012*	-0.015***	-0.006
	(-2.43)	(-4.77)	(-1.89)	(-3.99)	(-0.93)
N	93756.000	93756.000	93756.000	93756.000	93756.000

Source: ESS data file round 6 - 9
* p<0.10, ** p<0.05, *** p<0.010

Appendix E: Test Statistics

Before the five models were estimated, the use of a country-fixed effects regression was confirmed by the test-results from a Hausman test. Moreover, heteroskedasticity was found for all five model, using a modified Wald test. Therefore, the regressions are estimated with robust standard errors. The test-statistic and p-values (in parentheses) are tabulated in Table 10.

Table 12: Test-statistics on fixed effects vs. random effects and heteroskedasticity

Test	(1) Poor countries	(2) Same ethnicity	(3) Different ethnicity	(4) Improve economy	(5) Enrich culture
Fixed Effects: F-Test	480.97 (0.00)	314.67 (0.00)	441.09 (0.00)	148.10 (0.00)	289.46 (0.00)
Random Effects: Breusch-Pagan LM	0.00 (1.00)	0.00 (1.00)	0.00 (1.00)	0.00 (1.00)	0.00 (1.00)
Hausman	11304.71 (0.00)	2652.01 (0.00)	10522.18 (0.00)	1866.36 (0.00)	5489.28 (0.00)
Modified Wald Test	2291.93 (0.00)	8224.29 (0.00)	3269.45 (0.00)	4118.34 (0.00)	7044.13 (0.00)

Appendix F: Data behind the Macro-level Variables

Table 13: GDP per capita

Country	2008	2010	2012	2014	2016	2018
Belgium	33,640	33,330	33,610	33,960	34,810	35,670
Czechia	15,430	14,900	15,060	15,370	16,520	17,640
Germany	32,320	31,940	33,280	33,930	34,700	35,860
Estonia	12,640	11,150	12,430	13,060	13,650	15,090
Ireland	38,600	36,790	36,690	39,890	50,710	57,960
Spain	24,200	23,040	22,080	22,210	23,760	24,880
France	31,310	30,690	31,160	31,320	31,770	32,830
Lithuania	10,110	9,030	10,300	11,250	12,040	13,310
Hungary	10,500	9,900	10,010	10,690	11,410	12,560
Netherlands	39,810	38,470	38,340	38,580	39,810	41,540
Poland	8,910	9,390	10,020	10,510	11,260	12,430
Portugal	17,260	16,990	16,110	16,260	17,010	18,110
Slovenia	19,190	17,750	17,360	17,620	18,540	20,170
Finland	37,330	35,080	35,140	34,390	35,280	36,820
Sweden	39,930	39,920	40,270	41,060	42,910	43,850
United Kingdom	30,940	29,750	30,200	31,220	32,050	32,710
Norway	68,610	66,220	66,900	67,340	68,090	69,530
Switzerland	57,030	56,150	56,660	57,730	58,200	59,870

Source: Eurostat database

Table 14: Social benefits in cash or kind as percentage of GDP

Country	2008	2010	2012	2014	2016	2018
Belgium	29.32	31.36	32.44	33.01	32.62	32.81
Czech Republic	21.38	23.55	23.71	23.41	22.37	22.39
Estonia	20.74	23.89	20.87	20.9	22.79	22.68
Finland	28.43	32.61	33.79	35.32	35.06	33.41
France	32.22	34.74	35.02	35.65	35.37	34.79
Germany	27.3	29.13	27.78	27.93	28.33	28.34
Hungary	26.66	26.58	25.32	23.57	22.77	21.33
Ireland	24.32	26.98	25.67	22.63	16.74	15.35
Lithuania	21.82	25.76	21.86	20.14	20.68	21.44
Netherlands	24.99	28.52	28.98	28.91	27.79	26.8
Norway	23.76	27.88	27.23	28.57	31.92	30.1
Poland	23.86	24.86	23.74	24.24	25.11	24.66
Portugal	25.76	28.03	27.7	27.65	26.66	25.78
Slovenia	25.94	29.96	30.15	28.51	27.67	26.42
Spain	23.12	26.97	27.6	27.6	26.62	26.33
Sweden	31.53	31.81	32.22	32.38	32.37	31.57
Switzerland	14.42	15.68	15.84	16	16.38	16.11
United Kingdom	24.56	27.43	27.14	26.24	25.46	24.59

Source: OECD database

Table 15: Share of first-time asylum applicants in population

Country	2008	2010	2012	2014	2016	2018
Belgium	0.104%	0.199%	0.166%	0.126%	0.126%	0.159%
Czechia	0.010%	0.004%	0.005%	0.009%	0.011%	0.013%
Germany	0.026%	0.050%	0.080%	0.214%	0.879%	0.196%
Estonia	0.001%	0.002%	0.006%	0.011%	0.011%	0.007%
Ireland	0.085%	0.042%	0.020%	0.031%	0.047%	0.076%
Spain	.	0.005%	0.005%	0.012%	0.034%	0.113%
France	.	0.074%	0.083%	0.089%	0.115%	0.166%
Lithuania	.	0.012%	0.019%	0.013%	0.014%	0.014%
Hungary	.	.	.	0.417%	0.287%	0.006%
Netherlands	0.082%	0.080%	0.058%	0.129%	0.114%	0.119%
Poland	0.019%	0.011%	0.024%	0.015%	0.026%	0.006%
Portugal	0.002%	0.001%	0.003%	0.004%	0.007%	0.012%
Slovenia	0.012%	0.010%	0.013%	0.017%	0.061%	0.135%
Finland	.	.	0.054%	0.064%	0.096%	0.053%
Sweden	0.264%	0.340%	0.462%	0.777%	0.227%	0.179%
United Kingdom	0.051%	0.036%	0.044%	0.050%	0.060%	0.058%
Norway	0.296%	0.191%	0.185%	0.214%	0.062%	0.048%
Switzerland	0.218%	0.198%	0.357%	0.289%	0.326%	0.179%

Source: Eurostat database

Table 16: Share of foreigners in population

Country	2008	2010	2012	2014	2016	2018
Belgium	.	13.87%	15.15%	15.64%	16.32%	16.81%
Czechia	.	3.79%	3.72%	3.77%	4.11%	4.41%
Germany	.	12.00%	11.35%	12.14%	13.27%	16.60%
Estonia	.	16.26%	16.00%	14.94%	14.73%	14.87%
Ireland	16.15%	16.06%	16.84%	16.27%	16.37%	16.79%
Spain	12.87%	13.51%	13.45%	12.81%	12.74%	13.29%
France	11.06%	11.31%	11.43%	11.71%	11.97%	12.22%
Lithuania	5.54%	5.12%	4.78%	4.67%	4.49%	4.66%
Hungary	.	4.36%	4.05%	4.53%	5.12%	5.48%
Netherlands	.	11.06%	11.39%	11.61%	12.11%	12.90%
Poland	.	1.69%	1.66%	1.63%	1.65%	1.83%
Portugal	.	7.21%	8.08%	8.24%	8.44%	8.84%
Slovenia	.	12.40%	11.19%	11.42%	11.69%	12.11%
Finland	.	4.27%	4.83%	5.46%	6.00%	6.60%
Sweden	.	14.32%	15.04%	15.89%	17.00%	18.53%
United Kingdom	.	11.39%	12.23%	12.49%	13.30%	14.35%
Norway	.	10.81%	12.34%	13.79%	14.85%	15.53%
Switzerland	.	.	25.57%	26.82%	27.91%	28.67%

Source: Eurostat database

Table 17: Short-term unemployment rate

Country	2008	2010	2012	2014	2016	2018
Belgium	6.975	8.317	7.567	8.533	7.858	5.958
Czechia	4.408	7.292	6.975	6.117	3.967	2.267
Estonia	5.517	16.742	9.992	7.383	6.767	5.375
Finland	6.367	8.383	7.683	8.658	8.792	7.358
France	7.425	9.267	9.767	10.308	10.067	9.058
Germany	7.425	6.967	5.383	4.992	4.133	3.400
Hungary	7.800	11.167	11.017	7.742	5.100	3.708
Iceland	2.983	7.558	6.025	4.958	3.008	2.742
Lithuania	5.825	17.842	13.408	10.725	7.900	6.183
Netherlands	3.667	5.008	5.825	7.425	6.025	3.842
Poland	7.042	9.675	10.108	9.017	6.192	3.858
Portugal	8.783	11.983	15.783	14.125	11.175	7.050
Slovenia	4.392	7.275	8.892	9.742	8.008	5.133
Spain	11.267	19.875	24.792	24.450	19.650	15.258
Sweden	6.167	8.575	7.967	7.933	6.950	6.283
Switzerland	..	4.803	4.484	4.829	4.919	4.714
United Kingdom	5.617	7.808	7.925	6.142	4.825	4.017

Source: OECD database

Appendix G: Google Trends Analysis

Figure 1: Worldwide Google Trends analysis on “European Migrant Crisis”